

APPENDIX 6

Colorado Canyons National Conservation Area Implementation and Monitoring



On the Move in the CCNCA

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Implementation and Monitoring

Implementation

Implementation of this Resource Management Plan (RMP) will occur over the life of the plan and is tied to the BLM budget process. Proposed actions are prioritized in the RMP, but actual implementation actions are contingent upon the availability of funding each year.

The use of the Recreation Opportunity Spectrum (ROS) helps in maintaining flexibility and increases the viable life of the RMP by allowing consideration of future proposals not specifically listed in an RMP. In order to be considered, proposals would need to be consistent with assigned ROS classifications and desired future conditions. The Bureau of Land Management (BLM) preferred alternative is based on adaptive management, which allows for innovative solutions in making any necessary adjustments caused by changing times and increased visitor use by managing for general goals and objectives developed with the local community through the collaborative planning process and by stating desired future conditions for the Colorado Canyons National Conservation Area (CCNCA). Adaptive management will allow the BLM and the community of CCNCA users to continue to collaborate to determine what changes in management will be needed to protect natural resources and maintain visitor experiences at the appropriate time.

Implementation of proposed actions, whether included in this plan or developed to accommodate future needs, will require environmental review prior to any irretrievable commitment of resources. This review will comply with the National Environmental Policy Act of 1969 and will include public involvement prior to any decision-making by the BLM.

Monitoring

There are two levels of monitoring to be used in managing CCNCA resources; the standard monitoring, included in all BLM land management programs, and monitoring for adaptive management using the Limits of Acceptable Change process (discussed below). The first level involves the monitoring method that each BLM Resource Program incorporates into its management process. Monitoring is actually an integral part of all actions and programs, used not only to measure the effectiveness of actions implemented but also to record any impacts to the natural resources. When monitoring determines that impacts have reached an unacceptable level, mitigation is initiated to reverse the situation. This may include a reduction in, or elimination of, the action or situation causing the impact.

Monitoring Limits of Acceptable Change for Adaptive Management

Introduction

Communication with the local community and visitors to the CCNCA has shown that the public is content with the condition of the natural environment and the current level of infrastructure (the physical setting), the level of use and the amount of interaction with other visitors (the social setting), and the current level of management (the managerial setting) provided under the guidance of the Ruby Canyon/Black Ridge Integrated Resource Management Plan (1998). However, the legislation that designated the CCNCA included direction and guidance in preparing a new RMP. Throughout this new planning process, it has become evident that the public values the experiences they derive from recreational pursuits within the CCNCA and would oppose significant changes to the physical setting or the opportunities now available. The changes that tend to be viewed favorably are those that improve the resource condition and enhance opportunities for more readily achieving experiences and benefits. An example would be the designation of the majority of Mack Ridge as a “quiet-use area” for the purpose of improving the quality of experience for non-motorized trail users, who compose over 95 percent of the area’s use.

Public involvement in the planning process has revealed a strong desire to maintain the current conditions found within the CCNCA for as long as possible, implementing change only when the resource impact and social settings dictate that change is necessary. This objective can be accomplished through the Limits of Acceptable Change (LAC) process. The LAC process involves monitoring a resource or setting in order to prevent more than a predetermined level of change from occurring. These defined limits of change are known as *standards*. Once a standard is reached, mitigation is implemented in an effort to return the situation to the desired condition. In some cases, mitigation actions are set in the RMP; in others the desired outcome is set in the RMP, but actual mitigation is site-specific and may depend on the social and environmental direction at the time. Standards must be well defined and measurable for effectively determining when an LAC has been reached. Attention is focused on specific locations where the projected conditions are expected to result in changes to the physical and/or social setting that will exceed what is determined to be acceptable. Other tools that are integral to this process include the Recreation Opportunity Spectrum (ROS) that defines the various social, physical, and managerial settings throughout the CCNCA, and Benefits-Based Management (BBM) that looks at the visitors’ ability to realize the experiences and benefits they desire, derived from participating in recreational opportunities offered in the CCNCA. ROS and BBM are both discussed in more detail in *Appendix 5* of this draft RMP.

Monitoring is fundamental to resource planning and management. Monitoring levels vary, depending on the level of impacts and management priorities. The preferred alternative for this draft RMP is an adaptive management approach that

allows current management to continue until LAC standards indicate action is necessary. This requires strict adherence to the monitoring plan. For adaptive management and the LAC process to function successfully, BLM management needs to recognize when predetermined standards have been reached. This can only be accomplished through careful monitoring of the physical and social settings. Failure to identify when standards have been breached will result in degradation of the physical setting and a reduction in the ability of visitors to realize desired experiences and benefits.

Monitoring Program

There are two aspects to be considered in the monitoring program, the social setting and the physical setting. The social setting reflects number of people and number and type of encounters that take place in defined settings. The setting is defined in terms of ROS classifications that can range from a primitive setting, where solitude is valued, to an urban park setting, where social encounters are common and companionship is valued. ROS classifications assist visitors by directing them to the areas most likely to provide the experiences and benefits desired. The physical setting is also defined by the ROS classification assigned. The physical setting ranges from primitive, where the landscape is remote, pristine, and shows minimal evidence of human presence; to the urban park setting, which is manipulated to provide a desired setting and includes an abundance of facilities to accommodate heavy recreational use. Although the normal ROS range goes from a primitive setting to an urban park setting, the CCNCA was designated for the conservation and enjoyment of the natural environment, so the ROS range of settings considered in this planning process varies from *primitive* to *roaded natural* (see "Recreation Opportunity Spectrum" in *Appendix 5*).

Social Setting

Prior to monitoring, standards must be set for defining the minimum acceptable situation that achieves the desired social setting, based on ROS and the desired future condition. Examples of factors for which standards are set could include the number of contacts that visitors encounter with other parties, the level of developed facilities, and the acceptable noise level.

The formal method of monitoring the social setting will be through the continued use of visitor satisfaction surveys. Two surveys have been conducted in the CCNCA by Northern Arizona University; one in 1995 and the other in 2002. These comprehensive surveys include information on visitor demographics, preferred activities, recreation experiences and benefits, and setting preferences; as well as evaluation of BLM management, facilities, and services. Visitor surveys should be completed in three-year intervals to ensure that the social settings and visitor satisfaction are being maintained. If funding for formal surveying is unavailable and informal monitoring indicates that the social setting

is appropriate, formal surveys could be stretched to a maximum of five years. Allowing surveys to lapse beyond five years is not recommended since the foundation of the RMP is based on adaptive management. Visitor surveys must comply with Office of Personnel Management requirements.

Monitoring will also be done on an informal basis through BLM field personnel, volunteers, and public participation. BLM field staff and volunteers would have training to generate awareness of the standards being monitored and gather data through visitor contacts and observation of social conditions. Comments from the public could be in the form of letters, telephone calls, e-mails, public meetings, feedback from special interest groups, or office visits. When informal monitoring begins to indicate that the desired condition of the social setting is not being met, the next formal visitor survey should be implemented as soon as possible, regardless of interval timing.

Physical Setting

Standards must also be set to properly monitor and evaluate the physical setting. Considerations in the development of standards include maintaining the physical setting for ROS and maintaining the health of the natural resources. The health of the natural resources does not have to relate to recreation, although a healthy environment normally enhances recreation experiences and benefits. Examples of resources for which standards could be developed include trail conditions, water quality, range condition, and wildlife populations. Again, standards must be defined and measurable to effectively determine when limits have been reached and mitigation is necessary. Standards established under the BLM Standards for Land Health will be the basis for this effort, although CCNCA-specific standards can be developed in addition to the five Land Health Standards.

Formal monitoring for the physical setting is done through a team composed of appropriate BLM resource specialists. The resource specialists determine the frequency of monitoring, but, as a minimum, a comprehensive assessment addressing all set standards would occur every three years. If conditions arise that hinder the ability of BLM resource specialists to accomplish monitoring on schedule, other means such as assistance from other agencies or contracting, should be explored. This means that the standards must be well defined, since monitoring personnel may not be familiar with the resource area.

BLM field personnel, as well as volunteers, conduct informal monitoring. Both sources need to be familiar with the set standards. BLM personnel would monitor through visual assessment during normal field operations and by implementing a photo-monitoring program. If informal monitoring results in resource concerns, the appropriate resource specialist is notified. Volunteer agreements and training can be used, preparing volunteers to *observe* resource

conditions and/or assist with the photo-monitoring program. The participating volunteer would submit a brief report after each field visit.

Monitoring the natural setting is critical to the management of the CCNCA under this RMP. The CCNCA would benefit from adding an ecologist, facilitating the overall monitoring process for the resource setting and serving as the primary watchdog for LAC needs, to its full-time staff.

Implementation of Change

When evaluation of monitoring data reveals that standards are being approached, the situation must be mitigated. This trigger point could involve the social setting, the physical setting, or both. The mitigating action may be predetermined in the RMP, or the RMP may give direction but not specific actions for mitigating the situation. When the specific actions are not predetermined, the BLM resource team needs to convene and determine the appropriate change(s) to implement at the time. Public involvement is critical to this process.